students of the Chemistry Department of Delhi University are compelled to obtain the computer facility outside;

(b) if so, what are the reasons therefor;

(c) what is the number of research students and teachers annually using the computer facility in the said Department; and

(d) what is the number of research publications which have been made since then?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE IN THE DEPARTMENT OF EDUCATION IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (PROF. M. G. K. MENON): (a) to (c) According to the information furnished by the University of Delhi the Chemistry Department of the University has been provided with a micro computer (HP 9050, capacity one million instructions per second) by the University Grants Commission. 45 students, research scholars and teachers of the Department are utilising this computer. However, as the computer has limited capabilities, the Department itself permits students and teachers to use the central computer facilities of the University located at the Delhi School of Economics.

(d) The Department of Chemistry has published more than 200 research papers in different areas of Chemistry since the setting up of computer facility in the Department in November, 1986.

Inoperational of INSAT-IB and launching of INSAT-2 series

1762. SHRI KAMAL MORARKA: Will the PRIME MINISTER be pleased to refer to answer to Unstarred Question 103 given in the Rajya Sabha on 14th March, 1990 and state:

(a) by when INSAT-1B is likely to go out of operation;

(b) whether INSAT-2 series is being planned as a more powerful series, which would enable multifold expansion of the existing network; and

(c) if so, what are the salient features thereof?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE IN THE DEPARTMENT OF EDUCATION IN THE MINISTRY OF HUMAN RESOURCES DEVELOPMENT (PROF. M.G.K. MENON): (a) It is expected that INSAT-1B will continue to be in operation till October, 1990 but with increased orbital inclination.

(b) Yes, Sir.

(c) INSAT-2 Series is planned as a system with three spacecraft in orbit compared to the two spacecraft configuration of INSAT-1. Further each INSAT-2 satellite would provide 50 percent more capacity than INSAT-1 thus effectively more than doubling the total system capacity. INSAT-2 will utilise the extended C-band for the first time in addition to the normal C-band and S-band. The Meteorological Imaging Instrument (VHRR) on INSAT-2 will have a higher resolution than that of INSAT-1. INSAT-2 spacecraft will also carry a new Search and Rescue package that will provide alert information regarding ships, aircrafts and other vehicles in distress and equipped with appropriate beacons.

Computer facility in the Chemistry Department of Delhi University

1763. SHRI ANAND PRAKASH GAUTAM: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that a computer has been installed in the Chemistry Department of Delhi University under C.O.S.I.S.T. programme;

(b) if so, when was it installed;

(c) what amount was spent on its installation and the cost of annual maintenance thereof; and